Configuring the Natural Web Interface

This section provides information needed to configure the Natural Web Interface. If you are not familiar with a specific product, refer to the corresponding product documentation for more information.

This section covers the following topics:

- Supported HTTP Servers
- Configuring RPC and RPC Server
- Configuring the DCOM Server
- Configuring the Web Interface
- Configuring an HTTP Server
- Communication with Natural Security
- Troubleshooting

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Supported HTTP Servers

Operating System	HTTP Server
Windows NT (Intel)	• Microsoft Internet Information Server Version 4.0 • Netscape FastTrack Server Version 3.0 • Apache Version 1.3
UNIX (*)	• Netscape FastTrack Server Version 3.0 • Apache Version 1.3
OS/390 Unix System Services	• IBM Websphere Application Server for OS/390 V2R8.0

Configuring RPC and RPC Server

In the following configuration description, ETB255 is the name of a Broker and NATWEB1 the name of an RPC Server used for the examples.

For the installation and configuration, refer to the Natural RPC, Entire Net-Work, and Entire Broker documentation.

The following topics are documented below:

- Natural Version 3.1.5 for Mainframes / Natural Version 4.1.2 for UNIX Server / Natural Version 5.1.1 for Windows
- EntireX / Entire Broker SDK

Natural Version 3.1.5 for Mainframes / Natural Version 4.1.2 for UNIX Server / Natural Version 5.1.1 for Windows

On Windows NT/2000 and UNIX Systems

To change your NATPARM file so that two additional steplibs can be accessed in the RPC environment:

- In the section **Environment Assignments**, add the two steplibs SYSWEB and SYSEXT to the steplib parameter subsection.

In an OS/390 Unix System Services Environment

If Natural Security is installed:

- Define the steplibs SYSWEB and SYSEXT for your library.

If Natural Security is **not** installed:

- Modify the Natural program WEB-STLB in library SYSWEB by entering the DBID and file number of the associated FNAT system file of the libraries SYSWEB and SYSEXT. In case of need, you can add additional steplibs.
- STOW the program.
- The STACK parameter for your RPC server should have the following value:
  STACK=(LOGON SYSWEB;WEB-STLB)

EntireX / ENTIRE Broker SDK

On Windows NT / Windows 2000 Systems

Setting the environment variables is not required.

On UNIX (All Platforms)

All EntireX-relevant environment variables must be passed by the HTTP server.

Configuring the DCOM Server

To install and configure the DCOM server, proceed as described in the NaturalX documentation.

In the following configuration description, NATWEBEXT is the name of an external DCOM Server and NATWEB is the name of a local DCOM Server.

This section covers the following topics:

- DCOM
- NaturalX 3.1 Server

DCOM

On UNIX (All Platforms)

All EntireX-relevant environment variables must be be passed by the HTTP server.

In an OS/390 Unix System Services Environment

The DCOM version of the Natural Web Interface Server Extension is currently not supported for OS/390 Unix System Services.

NaturalX Server

For all servers supporting the Natural Web Interface, add the libraries SYSWEB and SYSEXT as steplibs, as described above in the section Natural Version 3.1 for Mainframes / Natural Version 4.1.2 for UNIX Server / Natural Version 5.1.1 for Windows Server.

Configuring the Web Interface

Natural Web Interface

For mainframe, Windows NT, Windows 2000 and UNIX environments no configuration is needed.

Natural Web Server Extensions for RPC

Adjust the configuration file using an external editor:

RPC_ETB_ID_NAME=ETB255
RPC_SERVER_NAME=NATWEB1

In an OS/390 Unix System Services Environment

The parameter NWW_OUT_CSS_TRANSLATE must be set in the Configuration File. Its value depends on the codepage used.

Natural Web Server Extensions for DCOM

Local DCOM (All Platforms)

No adjustments are needed for local communication.

External DCOM (All Platforms)

For external communication, see the NaturalX documentation for Registry changes, or adjust the configuration file using an external editor:

DCOM_SERVER_NAME=NATWEBEXT

On Windows NT/Windows 2000 (Internet Information Server)

If you use the Internet Information Server, the username for anonymous logon, e.g. NATWEB, is used.
NATWEB must belong to the group USER, or the GUEST account must be enabled.

On Windows NT/Windows 2000 (Apache)

If you use the Apache Server, the default settings for User/Group specified at httpd.conf work fine:

User/Group: The name (or #number) of the user/group to run httpd as User nobody
Group #-1

On Windows NT/Windows 2000 (Netscape Server)

If you use the Netscape Server, for anonymous logon, the SYSTEM account is used.

To use DCOM with remote access, a specific user, e.g. NATWEB, must be used to run the HTTP server.
This user must belong to the group USER and be defined on both computers.

Run Services from the Windows Control Panel to change the Logon for your HTTP Server service:

- Select Netscape Server Service > Startup...
- Log On As: yes
- Userid: NATWEB
- Password: **
- Confirm Password: **

Natural Web Server Extensions for NSAPI

Using an RPC Server

1. Install the Natural Web Server Extensions
2. Open the ...\config\mime.types file of the HTTP Server and add the **new line** at the end of the file:

   type=magnus-internal/nww exts=nww

3. Open the ...\config\obj.conf file of the HTTP Server and add the following **new lines** for the RPC Interface:

```
...
Init...
Init funcs="nww-nsapi,nww-init" fn="load-modules" shlib="nwwnsapi.dll"
Init fn="nww-init" file="<yourRoot>/nww/nsapi.ini
...
<Object name="default">
NameTrans...
NameTrans from="/nww" fn="pfx2dir" dir=" <yourRoot>/nww" name="nww"
...
Service... method=...
Service fn="nww-nsapi" method="(GET|POST|HEAD)" type=" magnus-internal/nww"
...
</Object>...
<Object name="nww">
ObjectType fn="force-type" type="magnus-internal/nww"
Service fn="nww-nsapi"
</Object>
...
```

4. If not only one service or broker is to be used, specify other files at the /nww directory.
5. If a static read of the .ini file is wanted (performance-relevant), add the *line shown in italics* to your obj.conf.

Using a DCOM Server

1. Install the Natural Web Server Extensions.
2. Open the ...\config\mime.types file of the HTTP Server.
3. Add the **new line** at the end of the file:

```
type=magnus-internal/nww    exts=nww
type=magnus-internal/nwwd   exts=nwwd
```

4. Open the ...\config\obj.conf file of the HTTP Server.
5. Add the following **new lines** for DCOM:

```
...
Init...
Init funcs="nwwd-nsapi,nwwd-init" fn="load-modules" shlib="nwwdnsapi.dll"
Init fn="nwwd-init" file="<yourRoot>/nwwd/nsapi.ini"
...
<Object name="default">
NameTrans...
NameTrans from="/nwwd" fn="pfx2dir" dir=" <yourRoot>/nwwd" name="nwwd"
...
Service... method=...
Service fn="nwwd-nsapi" method="(GET|POST|HEAD)" type="
magnus-internal/dnww"
...
</Object>...
```



```
<Object name="nwwd">
ObjectType fn="force-type" type="magnus-internal/nwwd"
Service fn="nwwd-nsapi"
</Object>
...
```

6. If not only one service or broker is to be used, specify other files at the /nwwd directory.
7. If a static read of the .ini file is wanted (performance-relevant), add the *line shown in italics* to your obj.conf.

Configuring an HTTP Server

Windows NT/Windows 2000 (Internet Information Server 4.0)

If you use the Internet Information Server, the username for anonymous logon, e.g. |USR_NATWEB, is used.

| USR_NATWEB must belong to the group USER, or the GUEST account must be enabled.

Communication with Natural Security

The new version EntireX Broker SDK supports the usage of two passwords and userids.

The first userid is used to get access through EntireX Security and the second for Natural Security.

The HTTP Server Security is involved as a third security system.

HTTP Server Security:

Restrict the access of the NWW interface at your HTTP Server. For details, refer to your HTTP server documentation.

EntireX Security:

In the configuration File the NWW_USER_ID, NWW_PASSWORD has to be specified.

Natural Security:

A second UserId/Password (RPC_USER_ID, RPC_PASSWORD) has to be set.

If the parameter USE_REMOTE_USER is activated, the RPC_USR_ID will be set/overwritten. The RPC_PASSWORD remains unchanged.

It is necessary to setup Natural Security with "AUTO=ON" to pass security without Password. If no RPC_USER_ID/RPC_PASSWORD pair is set, the NWW_USER_ID/NWW_PASSWORD will be used to enshure the compatibility with the existing implementation.

